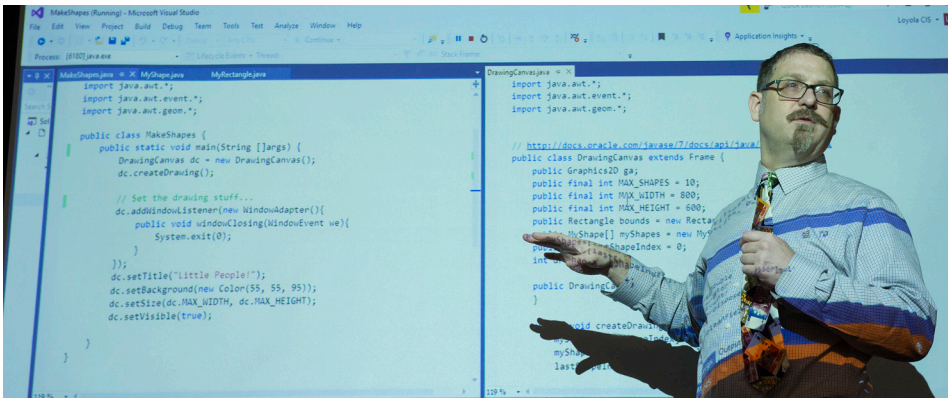
COLLEGE OF ARTS + SCIENCES

Computer Science



This world is run by computers. With a few lines of code you can do incredible things—build a billion-dollar company, create global networks of people, inspire or fund massive social movements, rob a bank (please don't do the last one). This major teaches you more than a practical skillset. It teaches you a new language—one that is used every day but only some of us can speak. It teaches you the language used to process information, recreate, and communicate with each other. Therefore, those of us who learn to speak it become true architects of our culture. They become shapers of the world and its perceptions. At Loyno, you can become one of those game-changers. Whatever application of computer science calls to you, we're ready for you to blow our minds.

This is the place.

In the past decade, New Orleans has become a hub for entrepreneurs in all sectors. It was recently ranked first in Forbes' list of New Brainpower cities in the United States, and every new business wants to have the best tech department in the city. There are currently 3,000 unfilled positions in software development in Louisiana waiting for a candidate like you. This place, known for its culture of art, music, and cuisine, is now known also for its technological innovation. Come be a part of what's next.

The three Computer Science degrees offered by Loyola provide students with incredible opportunities to pursue a career in almost any field. These degrees provide not just a theoretical but also practical application of the core concepts of computer programming. Students also earn real-world professional experience through the required internship program, so by the time you're looking for a job, you'll have already had one.

Courses

In addition to completing an internship for practical experience, our program's curriculum includes core courses from computer science and related disciplines for a solid foundation in computer science. Here's a sample of what you can expect to learn and do:

Introduction to Programming

This course is an introduction to concepts and terminology in computer programming, including interface building and problem-solving techniques in various programming environments. Emphasis is placed on the basics of software design and on elementary applications to mathematics and other disciplines.

Computer Organization

This course introduces the topics of digital logic, digital systems, machine level representation of data, assembly level machineorganization, memory system organization, I/O, and communication.

Data Structures & Algorithms

This course covers the basics of data structures, such as abstract data types, linked lists, stacks, queues, trees, and graphs. Applications to a number of problems, both practical and theoretical, are studied, including sorting, searching, and changing from recursion to iteration.

Programming Languages

This course explores the design and implementation of procedural, object-oriented, and logic programing language paradigms in modern computer systems. Topics include parameters, data types, abstraction, storage issues, and static/dynamic attributes.

Loyola University New Orleans
Department of Mathematics and Computer Science

Monroe Hall, Room 440
6363 St. Charles Ave., Box 35
New Orleans, LA 70118

Phone: 504-865-3340
Fax: 504-865-2051
math@loyno.edu

cas.loyno.edu